

CREVE COEUR

300 North New Ballas Road • Creve Coeur, Missouri 63141 (314) 432-6000 • Fax (314) 872-2539 • Relay MO 1-800-735-2966 www.creve-coeur.org

PUBLIC NOTICE

APPLICATION TO PLANNING AND ZONING COMMISSION #20-022 FOR SITE DEVELOPMENT PLAN FOR PARKING LOT ADDITION AT 633 EMERSON ROAD

FOR THE MEETING OF: Monday, August 3, 2020, 6:30 PM

LOCATION: 633 Emerson Road, Zoned CB – Core Business District

REQUEST: Jennifer Gross, of Altus Properties, on behalf of DOC-633 Emerson Road MOB, LLC, property owners of 633 Emerson Road, has submitted an application for a 15,000 square foot parking lot expansion to provide an additional 36 parking spaces to the site, with new parking lot lighting. Section 405.1080 requires site plan review by the Planning and Zoning Commission for any proposed alteration that would significantly affect the exterior of a building. Section 405.370(G)(1)(b) requires Council review and approval of all development or redevelopment plans, other than minor site plans under 5,000 square feet of new site coverage, for the properties within the area bounded by Olive Boulevard on the north, Old Ballas Road on the south and east and I-270 on the west.

ADDITIONAL INFORMATION: Review of the site development plan is scheduled for the meeting on Monday, August 3, 2020. All meetings are held at 6:30 p.m., in the Council Chambers of the Creve Coeur Government Center located at 300 North New Ballas Road. Due to the pandemic emergency, the Planning and Zoning Commission and City Council meetings will be held via teleconference until further notice. Online meetings are hosted through a remote conferencing service called Zoom, which offers audio and/or video conferencing. We encourage you to attend remotely if you have any questions or wish to make a statement. For more information on the meeting and to register please go to: http://www.crevecoeurmo.gov/1125/Public-Hearing-Registration.

In addition, you can submit written or e-mail comments to Planning staff in advance of the meeting. Additional information regarding this proposal is available at the Government Center, Planning Division offices or on the City's website at www.crevecoeurmo.gov/447/Current-Planning-Projects. You may also call (314) 872-2501 or e-mail wkelly@crevecoeurmo.gov.

APPLICANT / **PROPERTY MANAGER:**

Jennifer Gross **Altus Properties**

231 Bemiston Ave., Suite 650

St. Louis, MO 63105

APPLICANT'S REPRESENTATIVE:

Yosef Howley, P.E.

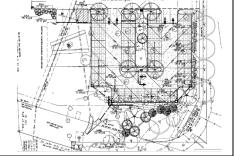
CEDC

10820 Sunset Office Drive

Suite 200

St. Louis, Missouri 63127





STAFF CONTACT: Whitney Kelly, AICP, City Planner

CC: Ellen Lawrence and Nicole Greer, Ward II

Key Issues:

Does the request further the goals and/or implement the Comprehensive Plan and the Design Guidelines?

Comprehensive Plan References

- Central Business District
- West Olive and Large **Commercial Properties** Mixed-Use District (MU)

Zoning Code References

- Section 405.370: CB-Core Business District
- Section 405.540: Landscaping
- Section 405.680: Lighting
- Article VII Off-Street Parking and Loading Regulations
- Section 405.1080 Site Concept, Site Development and Minor Site Plan Approval

Aerial Photo



LEGEND EXISTING CONTOURS PROPOSED CONTOURS EXISTING STORM SEWER PROPOSED STORM SEWER EXISTING SANITARY SEWER RIGHT-OF-WAY EASEMENT CENTERLINE EXISTING TREE EXISTING SPOT ELEVATION \times 433.28 433.28 PROPOSED SPOT ELEVATION _____ T.B.R. TO BE REMOVED T.B.R.& R TO BE REMOVED & RELOCATED TO BE USED IN PLACE ADJUST TO GRADE BACK OF CURB FACE OF CURB WATER MAIN ------ w ------- w ____ G _____ G GAS MAIN UNDERGROUND TELEPHONE OVERHEAD WIRE —— E ——— E UNDERGROUND ELECTRIC SILTATION CONTROL FIRE HYDRANT POWER POLE WATER VALVE LIGHT STANDARD

STORMWATER RUNOFF CALCULATIONS

(15 Yr. / 20 Min. STORM)

TOTAL SITE AREA = 3.63 ac. **EXISTING RUNOFF CALCULATIONS** 0.521 ac. x 3.54 c.f.s./ac. = 1.845 c.f.s. 1.384 ac. x 3.54 c.f.s./ac. = 4.901 c.f.s. 1.725 ac. x 1.70 c.f.s./ac. 3.63 ac. = 2.933 c.f.s. PROPOSED RUNOFF CALCULATIONS 0.521 ac. x 3.54 c.f.s./ac. = 1.845 c.f.s. PAVEMENT: 1.382 ac. x 3.54 c.f.s./ac. = 4.891 c.f.s. $\frac{1.728 \text{ ac.}}{1.78 \text{ ac.}} \times 1.70 \text{ c.f.s./ac.} = \frac{2.938 \text{ c.f.s.}}{9.674 \text{ c.f.s.}}$ PERVIOUS:

= (-0.05) c.f.s.

LEGAL DESCRIPTIONS

(FROM TITLE COMMITMENT

9.679 c.f.s. - 9.674 c.f.s.

LEGAL DESCRIPTION

PARCEL #2:

A TRACT" OF LAND BEING PART OF LOTS 12, 13, 14, 15, 16, AND 17 OF EMERSON TERRACE. A SUBDIVISION ACCORDING TO THE PLAT THEREOF RECORDED IN DAILY NUMBER 29 ON MARCH 19 1942 IN THE ST. LOUIS COUNTY RECORDS, IN SECTION 3, TOWNSHIP 45 NORTH RANGE 5 EAST ST. LOUIS COUNTY, MISSOURI, AND BEING MORE PARTICULARLY DESCRIBED AS: BEGINNING AT THE INTERSECTION ON THE SOUTH LINE OF EWEN DRIVE, 50 FEET WIDE, WITH THE EAST RIGHT-OF-WAY LINE AT INTERSTATE HIGHWAY 270 (FORMERLY 244): THENCE SOUTH 89 DEGREES 12 MINUTES 03 SECONDS EAST 230.78 FEET AND ALONG A CURVE TO THE RIGHT WHOSE RADIUS POINT BEARS SOUTH 0 DEGREES 47 MINUTES 57 SECONDS WEST AT 20.00 FEET FROM THE LAST MENTIONED POINT, DISTANCE OF 16.75 FEET ALONG SAID SOUTH LINE OF EWEN DRIVE TO THE WEST LINE OF EMERSON AVENUE AS WIDENED BY A ROAD DEDICATION PLAT RECORDED IN PLAT BOOK 281, PAGE 17 OF THE ST. LOUIS COUNTY RECORDS; THENCE SOUTH 0 DEGREES 13 MINUTES 00 SECONDS WEST 324.25 FEET AND SOUTH 27 DEGREES 43 MINUTES 02 SECONDS WEST 60.33 FEET ALONG SAID WEST LINE OF EMERSON AVENUE TO A POINT: THENCE ALONG A CURVE TO THE RIGHT WHOSE RADIUS POINT BEARS NORTH 26 DEGREES 40 MINUTES 53 SECONDS WEST 60.00 FEET FROM THE LAST MENTIONED POINT, A DISTANCE OF 45.59 FEET TO THE NORTH LINE OF IDA DRIVE. 40 FEET WIDE: THENCE NORTH 73 DEGREES 08 MINUTES 52 SECONDS WEST 144.29 FEET AND ALONG A CURVE TO THE RIGHT WHOSE RADIUS POINT BEARS NORTH 16 DEGREES 51 MINUTES 00 SECONDS EAST 1820.88 FEET FROM THE LAST MENTIONED POLNT, A DISTANCE OF 40.22 FEET ALONG SAID NORTH LINE OF IDA DRIVE, 40 FEET WIDE, TO THE AFORESAID EAST RIGHT-OF-WAY LINE OF IDA DRIVE, 40 FEET WIDE, TO THE AFORESAID EAST RIGHT-OFWAY LINE OF LNTERSTATE HIGHWAY 270 (FORMERLY 244); THENCE NORTHWARDLY ALONG SAID RIGHT-OF-WAY LINE OF INTERSTATE HIGHWAY 270 (FORMERLY 244) THE FOLLOWING COURSES AND DISTANCES: NORTH 02 DEGREES 38 MINUTES 19 SECONDS WEST 162.73 FEET, NORTH 23 DEGREES 12 MINUTES 03 SECONDS EAST 27.19 FEET, AND NORTH 0 DEGREES 30 MINUTES 23 SECONDS EAST 150.05 FEET TO THE POINT OF BEGINNING, ACCORDING TO SURVEY BY VOLZ ENGINEERING AND SURVEYING INC. ON NOVEMBER 5 1990.

IDA DRIVE (A PRIVATE 40-FOOT-WIDE ROAD) AS SHOWN ON PLAT OF EMERSON TERRACE, A SUBDIVISION RECORDED IN PLAT BOOK 38 PAGE 37, BEING BOUNDED AS FOLLOWS: ON THE NORTH BY THE SOUTH LINE OF LOT 16 AND PART OF LOT 17 OF AFORESAID EMERSON TERRACE; ON THE SOUTH BY THE NORTH LINE OF THE CREVE COEUR BRANCH OF MISSOURI PACIFIC RAILROAD RIGHT-OF-WAY: ON THE EAST BY THE WEST LINE OF EMERSON AVENUE; ON THE WEST BY THE EAST LINE OF HIGHWAY 270 (FORMERLY 244).

LOTS 1, 2, AND 3 OF EMERSON TERRACE, ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 38 PAGE 37 OF THE ST. LOUIS COUNTY RECORDERS OFFICE. EXCEPTING THEREFROM THAT PART CONVEYED TO THE CITY OF CREVE COEUR BY DEED RECORDED IN BOOK 8499 PAGE 757.

A TRACT OF LAND BEING PART OF EWEN DRIVE, 50 FEET WIDE, ACCORDING TO "EMERSON TERRACE," A SUBDIVISION ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 38 PAGE 37 OF THE ST. LOUIS COUNTY RECORDS.

SITE BENCHMARK

NAVD88 ELEV. - 629.07' FTUS

"O" IN THE WORD OPEN ON FIRE HYDRANT NEAR THE SOUTHEAST CORNER OF SUBJECT PROPERTY, AS SHOWN ON SURVEY.

PREPARED BY:



Suite 200 St. Louis, Missouri 63127 314.729.1400 **CIVIL ENGINEERING** 314.729.1400 Fax: 314.729.1404

PROPERTY DATA

OWNER

WATER SHED

FIRE DISTRICT

SCHOOL DISTRICT

ELECTRIC SERVICE

= Doc 633 Emerson Road Mob LLC = 633 EMERSON ADDRESS

CREVE COEUR, MO 63141 LOCATOR NUMBER = 170240754 = CB CORE BUSINESS DISTRICT ZONING = 158,291 s.f. or 3.63 ACRES AREA (TOTAL)

> = CREVE COEUR CREEK WATERSHED = CREVE COEUR

> > R=1820.08'

L=1.71' (R)

R=1820.08 D=0°03'14"

L=1.71' (S)

L TOP: 629.63'

5 W EASEMENT TO

DB.3β18, PG.134 -

CONCRETE

RETAINING WALL

6" CONC.

VFRT. CURF

RESERVE AREA FOR

— PUBLIC RIGHT−QF−WA

(SHOWN PER PB.3

DEDICATION

SITE/BENCHMARK/

ON FIRE HYDRANT ELEV. 629.07°

"O"/IN THE WORD OPEN

FLUME AT NEW

PIPE OUTFALL

UNION ELECTRIC COMPANY

(SHOWN RER PB.361, PG.54)

CH-N71° 57' 03"W 1.71' (S)

N00° 36' 00"E 41.88' (R) N00° 43' 48"E 41.88' (S)

~N10° 27′ 23″₩

8" V.C.P. C.I.P./

OWN PER MSD BASE MAP

PARCEL #2

= PARKWAY SCHOOL DISTRICT

PARKING LOT ADDITION **EMERSON TERRACE OFFICE PARK**

PAVEMENT 6 3

MARKING HATCH

IN THIS AREA.

-PFRVIOUS

PAVEMENT

PARCEL #1

PERVIOUS-

PAVEMENT

PERMEABLE

100.00' (R)

S00° 13' 00"W 324.23' (R)

PAVERS

SIGN (TYP.)

VERT. CURB

PROPOSED-

LIGHT POLE

VERT. CURB.

PERMEABLE

PAVERS

90.00' (R)

EMERSON ROAD (VARIABLE WIDTH)

(FORMERLY EMERSON AVENUE)

NO2* 32' 43"W 161.52' (R) NO2* 24' 55"W 161.52' (S)

NO2° 38' 19"W 162.73' (R.

60'x60' SIGN EASEMENT DB.21944, PG.2209-

N02° 43′ 31″W 203.63′ (S)

SITE DEVELOPMENT PLAN

INDEX OF SHEETS

= AMERENUE

SITE DEVELOPMENT PLAN OVERALL PLAN

R=1860.08'

D=0°09'54"

72° 19' 41"W 5.36' (S

R=1860.08' L=31.09' (R)

R=1860.08

— D=0°47'33"

L=25.73' (S)

25"W 25.73' (S)

07' 48"W

.18' (\$)

).66' (R)/ **12' 12"**E

3.18' (R)

L=5.36' (S)

ASPHALT PAVEMENT PERMEABLE PAVERS CONCRETE PAVEMENT (HEAVY DUTY)

TELEPHONE LINE

PERMEABLE I

PAVERS

PROPOSED-

LIGHT POLE

CONCRETI PAVEMEN1

MARKÉR POST

LEGEND

SCALE: 1 inch = 20 ft

● - DENOTES SET 1/2" x 18" REBAR WITH CAP STAMPED "MARLER L.S.-347-D" O - DENOTES FOUND IRON PIPE

O - DENOTES FOUND IRON ROD

SANITARY MH.

(UNABLE TO ACCESS)

(SHOWN PER MSD BASE MAP)

5'W EASEMENT TO M.S.D.

(SHOWN PER PB.361, PG.54)

PERMEABLE _

FOR PAVERS

DEDICATED TO CITY OF CREVE COEUR

PAVERS

DB.5994, PG.589

十 - DENOTES FOUND CROSS A - DENOTES FOUND RIGHT OF WAY MARKER

N00° 36' 00"E 400.00' (R)

5'W EASEMENT PB.38, PG.

20' BUILDING LINE

S00° 07' 48"W

S00° 00' 00"E 5

ADJUSTED P.

LAND AR

158,291 S

3.63± AC

N00° 43′ 48″E 400.00′ (

N00° 25' 11"E 150.10

LOCATION MAP

(N.T.S.) **GENERAL NOTES**

1.) ALL UTILITIES SHOWN HAVE BEEN LOCATED FROM AVAILABLE RECORDS. THEIR LOCATION SHOULD BE CONSIDERED APPROXIMATE. THE CONTRACTOR HAS THE RESPONSIBILITY TO NOTIFY ALL UTILITY COMPANIES, PRIOR TO CONSTRUCTION, TO HAVE EXISTING UTILITIES FIELD LOCATED. THE CONTRACTOR SHALL BE ON RECORD WITH THE MISSOURI ONE CALL SYSTEM. ALL PROPOSED UTILITIES SHALL BE

2.) ALL ELEVATIONS ARE BASED ON BENCHMARK SHOWN.

3.) BOUNDARY AND TOPOGRAPHIC SURVEY BY MARLER SURVEYING CO. 4.) ALL ON-SITE MATERIALS AND METHODS OF CONSTRUCTION TO MEET THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF CREVE COUER, MODOT AND M.S.D.

5.) ALL GRADED AREAS SHALL BE PROTECTED FROM EROSION BY EROSION CONTROL DEVICES AND/OR SEEDING AND MULCHING AS REQUIRED BY THE CITY OF CREVE COEUR AND MODOT 6.) PRIOR TO BEGINNING ANY WORK ON THE SITE, THE SUBCONTRACTOR SHALL CONTACT THE GENERAL CONTRACTOR FOR SPECIFIC INSTRUCTIONS RELEVANT TO THE SEQUENCING OF WORK.

) GRADING CONTRACTOR SHALL INSTALL SILTATION CONTROL PRIOR TO STARTING THE GRADING. ADDITIONAL SILTATION CONTROL DEVICES SHALL BE INSTALLED AS DIRECTED BY THE CITY OF CREVE

) ALL FILLS AND BACKFILLS SHALL BE MADE OF SELECTED EARTH MATERIALS, FREE FROM BROKEN MASONRY, ROCK, FROZEN EARTH, RUBBISH, ORGANIC MATERIAL AND DEBRIS. 9.) GRADING CONTRACTOR SHALL KEEP EXISTING ROADWAYS CLEAN OF MUD AND DEBRIS AT ALL TIMES.

.) PROPOSED CONTOURS SHOWN ARE FINISHED ELEVATIONS ON PAVED AREAS. ALL GRADING AND DRAINAGE TO BE IN CONFORMANCE WITH THE CITY OF CREVE COUER AND M.S.D.) SIDEWALKS ALONG THE ACCESSIBLE ROUTE SHALL NOT HAVE A SLOPE EXCEEDING 1'V: 20'H. SLOPES GREATER THAN 1'V: 20'H MUST BE DESIGNED AS A RAMP. SIDEWALKS TO BE CONSTRUCTED TO ST.

LOUIS COUNTY ADA STANDARDS. 13.) SIDEWALKS, CURB RAMPS, RAMPS AND ACCESSIBLE PARKING SPACES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT APPROVED "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES" (ADAAG) ALONG WITH THE REQUIRED GRADES, CONSTRUCTION MATERIALS, SPECIFICATIONS AND SIGNAGE. IF ANY CONFLICT OCCURS BETWEEN THE ADAA GUIDELINES AND THE INFORMATION ON THE PLANS, THE ADAA GUIDELINES SHALL TAKE PRECEDENCE AND THE CONTRACTOR SHALL NOTIFY THE

PROJECT ENGINEER PRIOR TO ANY CONSTRUCTION. 14.) NO GRADE SHALL EXCEED 3(H):1(V) UNLESS JUSTIFIED BY GEOTECHNICAL REPORT THAT HAS BEEN APPROVED BY THE CITY OF CREVE COEUR.

15.) STORM WATER SHALL BE DISCHARGED AT AN ADEQUATE NATURAL DISCHARGE POINT. SINKHOLES ARE NOT ADEQUATE NATURAL DISCHARGE POINTS.

16.) ALL LANDSCAPED AREAS TO BE FILLED WITH A MINIMUM OF 6" OF TOPSOIL. 17.) ALL LANDSCAPED AREAS DISTURBED BY OFF-SITE WORK SHALL BE IMMEDIATELY SEEDED OR SODDED, AS DIRECTED BY THE CITY OF CREVE COEUR OR MODOT UPON COMPLETION OF WORK IN THE AREA

18.) ADEQUATE TEMPORARY OFF-STREET PARKING FOR CONSTRUCTION EMPLOYEES SHALL BE PROVIDED. PARKING ON NON-SURFACED AREAS SHALL BE PROHIBITED IN ORDER TO ELIMINATE THE CONDITION WHEREBY MUD FROM CONSTRUCTION AND EMPLOYEES' VEHICLES IS TRACKED ONTO THE PAVEMENT

CAUSING HAZARDOUS ROADWAY AND DRIVEWAY CONDITIONS. 19.) ALL SEWER CONSTRUCTION AND MATERIALS TO BE IN ACCORDANCE WITH THE METROPOLITAN ST. LOUIS SEWER DISTRICT STANDARD CONSTRUCTION SPECIFICATIONS FOR SEWER AND DRAINAGE FACILITIES,

20.) PARKING CALCULATIONS (PER ZONING SECTION 405.820) PARKING REQUIREMENTS FOR OTHER HEALTH SERVICES

Four (4) parking spaces per one thousand (1,000) square feet of floor area: $38,277 \setminus 1,000 * 4 = 153$ TOTAL = 153 SPACES REQUIRED

PARKING PROVIDED ON SITE = 185 SPACES (INCLUDES 9 ADA STALLS)

) NO ON—SITE ILLUMINATION SOURCE SHALL BE SO SITUATED THAT LIGHT IS CAST DIRECTLY ON ADJOINING PROPERTIES OR ROADWAYS. ILLUMINATION LEVELS SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF CREVE COEUR. THE SITE LIGHTING STANDARDS AND LOCATIONS SHALL BE REVIEWED AND APPROVED PER THE REQUIREMENTS OF THE CITY OF CREVE COEUR. LIGHTING DESIGN SUBJECT T FINAL DESIGN OF LIGHTING ENGINEER.

22.) LANDSCAPING SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF CREVE COEUR.

23.) ALL PROPOSED IMPROVEMENTS SHALL BE CONSTRUCTED TO THE CITY OF CREVE COEUR AND COIUNTY

24.) ANY SIGNAGE PROPOSED FOR THIS SITE SHALL BE IN COMPLIANCE WITH THE ORDINANCES OF THE CITY OF CREVE COEUR. 25.) DENSITY CALCULATIONS

The area of a non-residential site which is covered by buildings, driveways, parking lots, loading areas but excluding landscaped and green spaces, plaza, pedestrian circulation and unpaved buffer areas. = 22,704 s.f.PARKING & DRIVE AISLES = 75,763 s.f.

98,467 s.f.± SITE COVERAGE $= 98,467 \pm s.f. / 158,163 \pm s.f. \times 100 = 62.3\%$

26.) FLOOR AREA RATIO (F.A.R.)

38,277 s.f. BUILDING 158,163 s.f. SITE AREA

SITE COVERAGE:

27.) ALL SIGNS AND BANNERS SHALL BE IN CONFORMANCE WITH ARTICLE VIII, SIGN REGULATIONS OF THE ZONING CODE. THE RELOCATION AND REPLACEMENT OF ALL SIGNS SHALL REQUIRE A PERMIT PER ARTICLE VIII SIGN REGULATIONS. ANY NON-CONFORMING SIGN AREAS MUST BE DOCUMENTED PRIOR TOT HE REMOVAL AND REPLACEMENT OF THE SIGN.

28.) STRUCTURE SETBACKS (PER CORE BUSINESS DISTRICT ZONING) FRONT 15 FT. SIDE 10 FT.

REAR 10 FT. BUFFER YARD 50 FT. (THAT ABUT THE SINGLE-FAMILY DISTRICT) 29.) AN UNDERGROUND IRRIGATION SYSTEM SHALL BE INSTALLED AS REQUIRED PER SEC. 405.540(10). 30.) PARKING LOT LIGHTING SHALL BE DOWNCAST AND FULLY SHIELDED IN CONFORMANCE WITH SECTION

405.680, LIGHTING OF THE ZONING CODE. 31.) ALL SIGNS AND BANNERS SHALL BE IN CONFORMANCE WITH ARTICLE VIII, SIGN REGULATIONS OF THE ZONING CODE. THE RELOCATION AND REPLACEMENT OF ALL SIGNS SHALL REQUIRE A PERMIT PER ARTICLE VIII SIGN REGULATIONS. ANY NON-CONFORMING SIGN AREAS MUST BE DOCUMENTED PRIOR

TOT HE REMOVAL AND REPLACEMENT OF THE SIGN. 32.) THE TRASH ENCLOSURE SHALL BE BUILT OF MATERIALS THAT ARE CONSISTENT WITH THE BUILDING, SUBJECT TO THE ZONING ADMINISTRATOR'S APPROVAL.

> THE UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SOURCES AND THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. THE VERIFICATION OF THE ACTUAL LOCATIONS OF ALL UNDERGROUND UTILITIES, EITHER SHOWN OR NOT SHOWN ON THIS DRAWING, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE LOCATED PRIOR TO GRADING OR CONSTRUCTION OF IMPROVEMENTS.



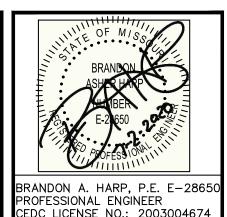
SPIRE MO EAST

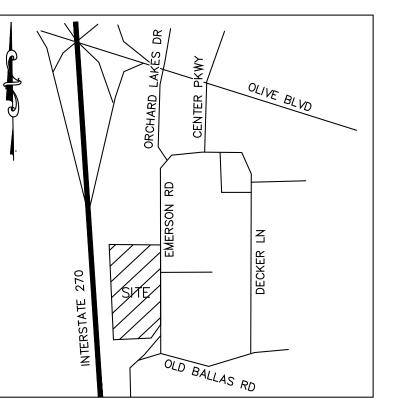
ST. LOUIS METROPOLITAN SEWER

Call BEFORE you DIG TOLL FREE 1-800-DIG-RITE MISSOURI ONE-CALL SYSTEM, INC

MISSOURI ONE CALL TICKET NUMBER 201011563 UTILITIES CONTACT BY MISSOURI ONE CALL WERE: AMEREN MO ELECTRIC ATT DISTRIBUTION CHARTER COMMUNICATIONS LEVEL 3 NOW CENTURY LINK EDWARD JONES MISSOURI AMERICAN WATER

> M.S.D. BASE MAP M.S.D. P-No.

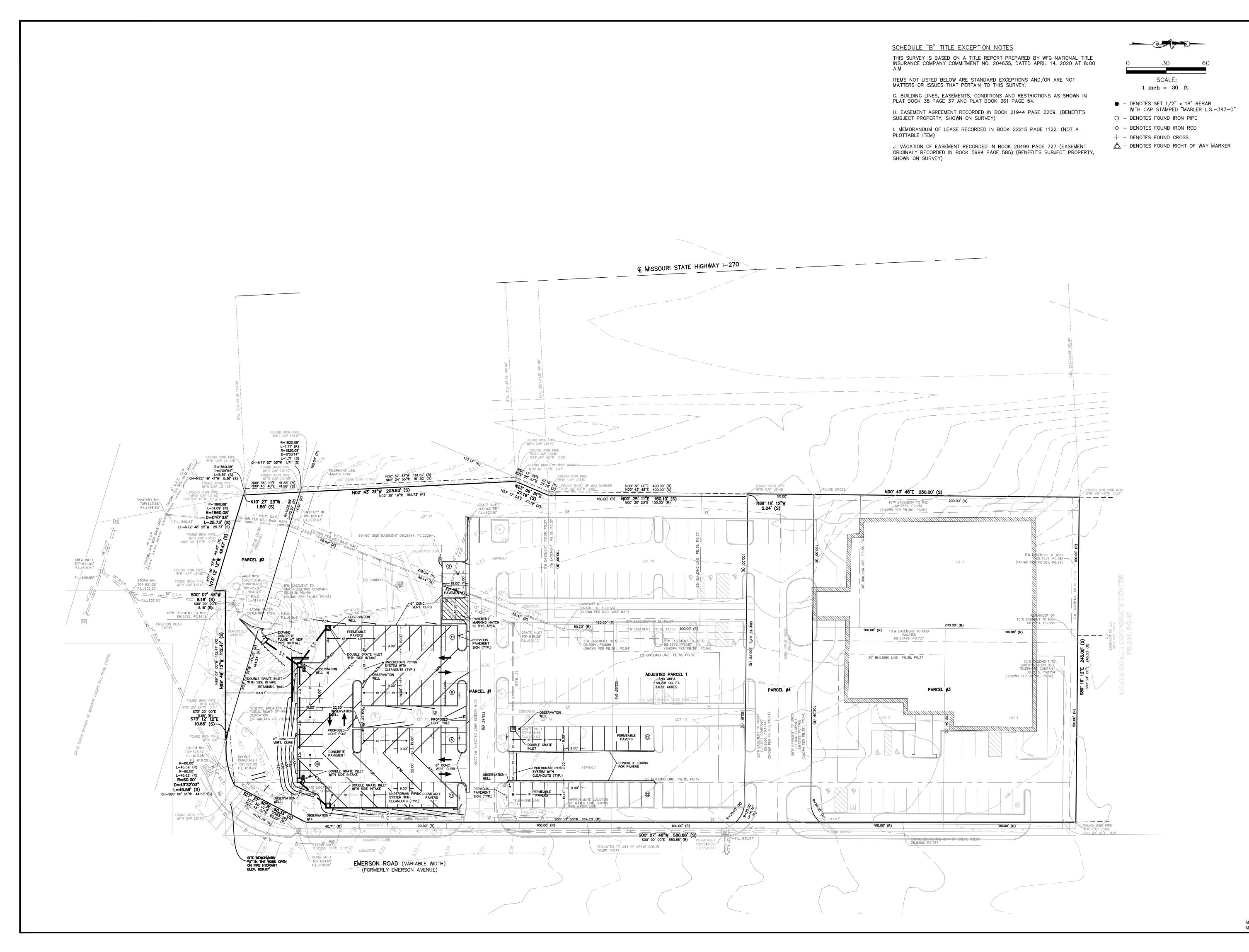


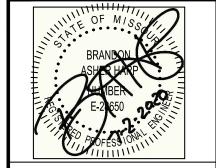


Proj. # 1921 No. Description Date Site Development Plan 07/02/202

SITE **DEVELOPMENT**

DRAWING NO.





BRANDON A. HARP, P.E. E—28650 PROFESSIONAL ENGINEER CEDC LICENSE NO.: 2003004674

> 10820 Sunset Office Driv Suite 200 Saint Louis, Missouri 63 314.729.1400 Fax: 314.729.1404

CIVIL ENGINEERING
DESIGN CONSULTANTS

Site Development Plan for PARKING ADDITION 633 EMERSON RD. CREVE COEUR, MO 63141

Proj. # 1921

No. Description Date

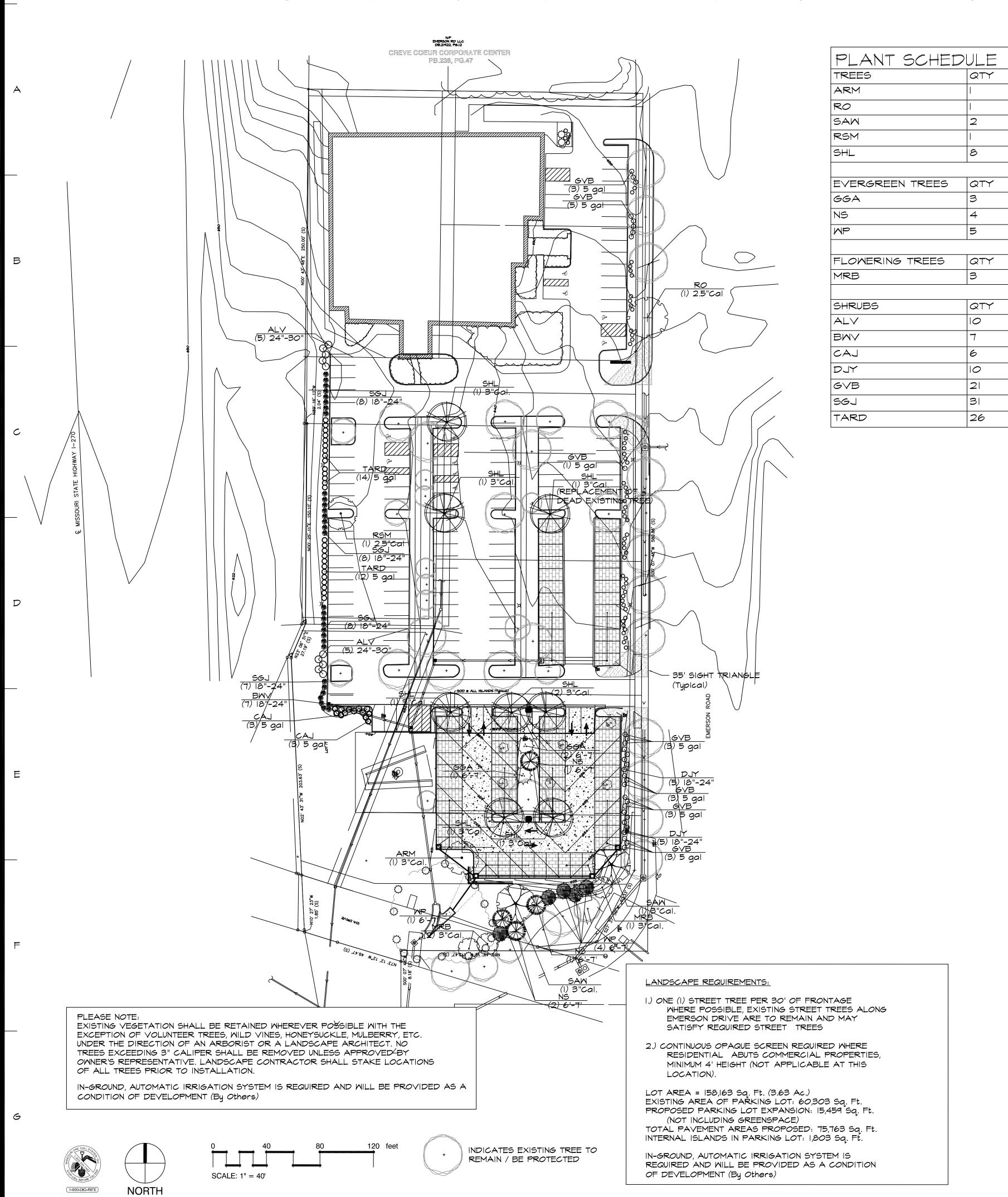
Site Development Plan 07/02/2020

OVERALL PLAN

SDP

DRAWING NO.

M.S.D. BASE MAP M.S.D. P-No.



TREES	QTY	COMMON / BOTANICAL NAME	SIZE	
ARM		Armstrong Red Maple / Acer rubrum 'Armstrong'	3"Cal.	
RO	Red Oak / Quercus rubra			
SAM	2	Sawtooth Oak / Quercus acutissima	3"Cal.	
RSM	1	'Red Sunset' Maple / Acer rubrum 'Franksred'	2.5"Cal	
SHL	8	'Skyline' Locust / Gleditsia triacanthos 'Skyline'	3"Cal.	
EVERGREEN TREES	QTY	COMMON / BOTANICAL NAME	SIZE	
GGA	3	Green Giant Arborvitae / Thuja plicata 'Green Giant'	6'-7'	
NS	4	Norway Spruce / Picea abies	6'-7'	
MP	5	White Pine / Pinus strobus	6'-7'	
FLOWERING TREES	QTY	COMMON / BOTANICAL NAME	SIZE	
MRB	3	Merlot Redbud / Cercis x 'Merlot'	3"Cal.	
SHRUBS	QTY	COMMON / BOTANICAL NAME	SIZE	
	 	Alleghany Leatherleaf Viburnum / Viburnum rhytidophyllum 'Alleghany'	24"-30	
ALV	10			
ALV BMV	7	Brandywine Viburnum / Viburnum nudum 'Brandywine'	18"-24"	
BMV	7		18"-24" 5 gal	
	7	Brandywine Viburnum / Viburnum nudum 'Brandywine'		
BMV CAJ DJY	7	Brandywine Viburnum / Viburnum nudum 'Brandywine' Compact Andorra Juniper / Juniperus horizontalis 'Plumosa Compacta'	5 gal	
BMV	7 6 10	Brandywine Viburnum / Viburnum nudum 'Brandywine' Compact Andorra Juniper / Juniperus horizontalis 'Plumosa Compacta' Dense Japanese Yew / Taxus cuspidata 'Densiformis'	5 gal	

7/16/2020 RMM

H N O L O G I E S

eek Drive (eae) 928–1250
issouri 63304 Fax: (eae) 928–1250
issouri 63304 Fax: (eae) 928–4563
is Architectural Corporation #2008008782

TECHT

TECHT

St. Charles, Missouri & Mo Landscape Archit

SET THE PROPOSED PARKING EXEMPLES OF THE PROPOSED PARKING EXEMPLES OF ROAD

DRAWN
R. MARDIS
CHECKED
RWM/EL

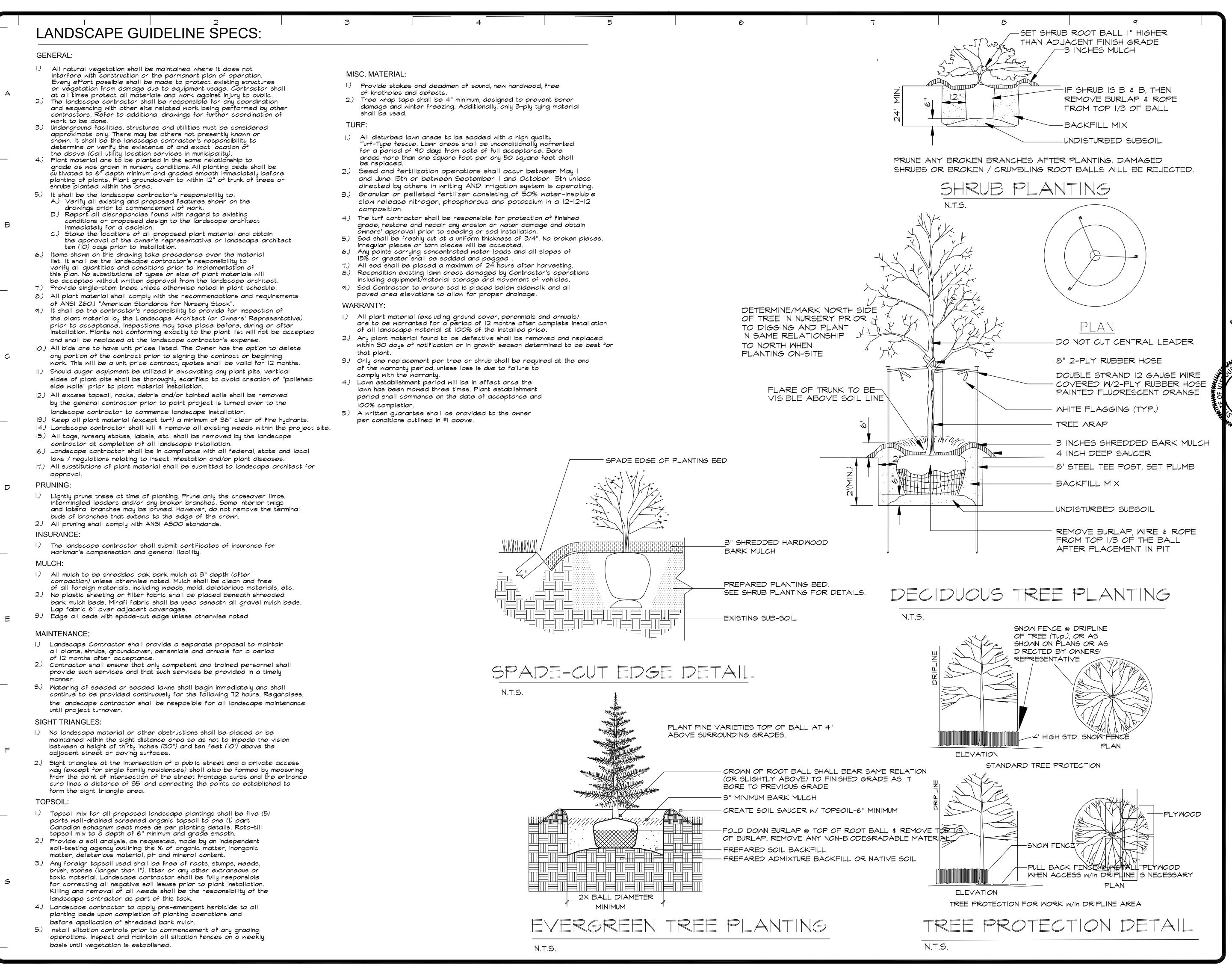
DATE
7/2/2020

SCALE
I"=40'-0"

JOB No.
2020-141

SHEET

SHEET



7/16/2020

OR

NOISN

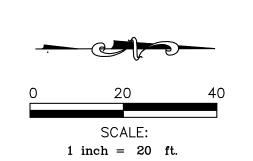
Q 0 0 OR

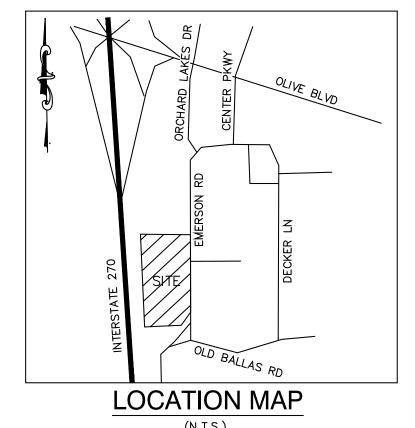
DRAWN R. MARDIS CHECKED RWM/EL DATE 7/2/2020 SCALE N.A. JOB No. 2020-141

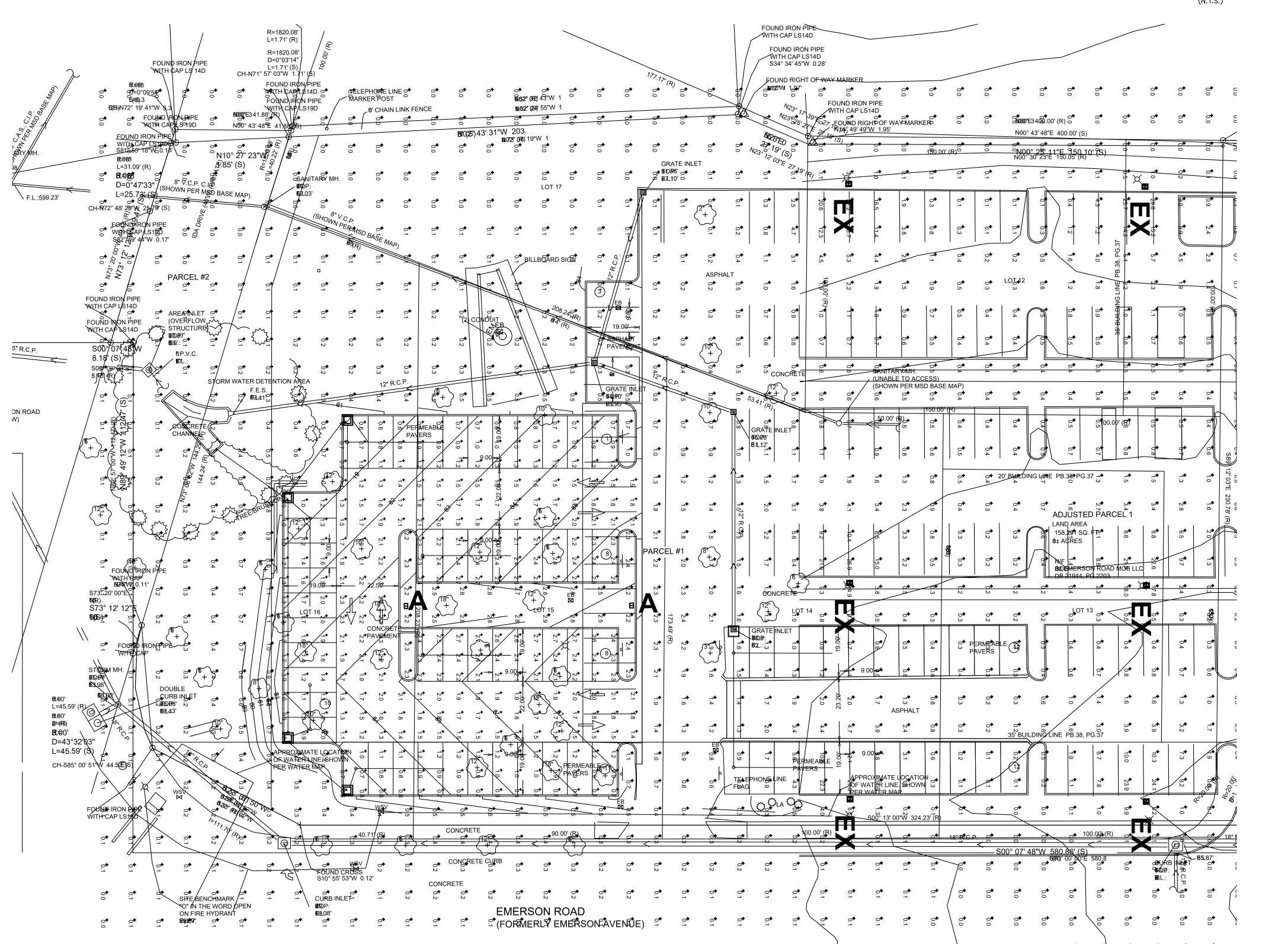
PHOTOMETRIC PLAN for a PARKING LOT ADDITION

EMERSON TERRACE OFFICE PARK

Luminair	e Sched	lule	
Symbol	Qty	Label	Description
)	2	Α	PRV-XL-C75-D-UNV-T5-BZ
+	6	EX	EXISTING FLOOD LIGHT POLE
		•	







JUARANTEE

PARKING ADDITION
633 EMERSON
CREVE COEUR, MO 63141

No. Description Date 06/29/2020

PHOTOMETRIC PLAN

DRAWING NO.

P

PREPARED BY:
GUARANTEE ELECTRIC
3401 Bent Ave
St. Louis MO 63116

Project	Catalog #	Туре	
Prepared by	Notes	Date	



Lumark

PRV / PRV-XL Prevail LED

Area / Site Luminaire

Typical Applications

Outdoor • Parking Lots • Walkways • Roadways • Building Areas

Interactive Menu

- Ordering Information page 2
- Mounting Details page 3
- Optical Configurations page 3
- Product Specifications page 3
- Energy and Performance Data page 4
- Control Options page 5

Product Certifications





















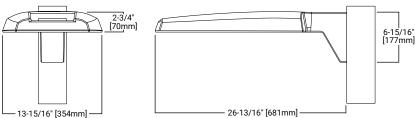


Quick Facts

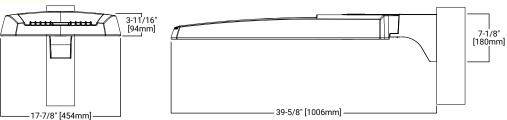
- Lumen packages range from 7,100 48,600 lumens (50W 350W)
- Replaces 70W up to 1,000W HID equivalents
- Efficacies up to 148 lumens per watt
- Energy and maintenance savings up to 85% versus HID solutions
- Standard universal quick mount arm with universal drill pattern

Dimensional Details

Prevail



Prevail XL





Lumark **PRV / PRV-XL Prevail**

Ordering Information

SAMPLE NUMBER: PRV-XL-C75-D-UNV-T4-SA-BZ

Product Family 1,2	Light Engine ³	Driver	Voltage	Distribution	Mounting (Included)	Color
PRV=Prevail	C15=(1 LED) 7,100 Nominal Lumens C25=(2 LEDs) 13,100 Nominal Lumens C40=(2 LEDs) 17,100 Nominal Lumens C60=(2 LEDs) 20,000 Nominal Lumens	D =Dimming (0-10V)	UNV=Universal (120-277V) 347=347V 480=480V 4	T2=Type II T3=Type III T4=Type IV T5=Type V	SA=Standard Versatile Arm MA=Mast Arm WM=Wall Mount Arm	AP=Grey BZ=Bronze BK=Black DP=Dark Platinum GM=Graphite Metallic
PRV-XL=Prevail XL	C75=(4 LED) 26,100 Nominal Lumens C100=(4 LED) 31,000 Nominal Lumens C125=(4 LED) 36,000 Nominal Lumens C150=(6 LED) 41,100 Nominal Lumens C175=(6 LED) 48,600 Nominal Lumens					WH=White
	Options (Add as Suffix)		Accessories (C	Order Separately) 17		
7030=70 CRI / 3000K CO	CT 5	PRVWM-XX=Wall Mount k	(it 8			

7030=70 CRI / 3000K CCT 5 7050=70 CRI / 5000K CCT 5

HSS=House Side Shield 6 L90=Optics Rotated 90° Left

R90=Optics Rotated 90° Right 10K=10kV/10kA UL 1449 Fused Surge Protective Device

HA=50°C High Ambient Temperature 7
PER=NEMA 3-PIN Twistlock Photocontrol Receptacle

PER7-NEMA 7-PIN Twistlock Photocontrol Receptacle
MSP/DIM-L12-Integrated Sensor for Dimming Operation, 8' – 12' Mounting Height 8,9
MSP/DIM-L30-Integrated Sensor for Dimming Operation, 12' – 30' Mounting Height 8,9
MSP-L12-Integrated Sensor ON/OFF Operation, 8' – 12' Mounting Height 8,9

MSP-L12=Integrated Sensor ON/OFF Operation, 8' – 12' Mounting Height ^{8,9} MSP-L30=Integrated Sensor ON/OFF Dimming Operation, 12' – 30' Mounting Height ^{8,9} MSPIM-L20=Motion Sensor for Dimming Operation, 9' – 20' Mounting Height ^{9,10} MS/DIM-L40W=Motion Sensor for Dimming Operation, 21' – 40' Mounting Height ^{9,10} MS-L20=Motion Sensor for ON/OFF Operation, 9' – 20' Mounting Height ^{9,10} MS-L40W=Motion Sensor for ON/OFF Operation, 21' – 40' Mounting Height ^{9,10} ZW=Wavelinx-enabled 4-PIN Twistlock Receptacle ^{9,11,12} ZW-SWPD4XX=Wavelinx Wireless Sensor, 7' – 15' Mounting Height ^{9,11,12,13} ZW-SWPD5XX=Wavelinx Wireless Sensor, 15' – 40' Mounting Height ^{9,11,12,13} ZW-LW-LW=LumaWatt Pro Wireless Sensor, Wide Lens for 8' – 16' Mounting Height ^{9,14} LWR-LN=LumaWatt Pro Wireless Sensor, Narrow Lens for 16' – 40' Mounting Height ^{9,14} (See Table Below)=LumenSafe Integrated Network Security Camera ^{15,16}

PRVMA-XX=Mast Arm Mounting Kit 8 PRVSA-XX-Standard Arm Mounting Kit ⁸
PRVXLSA-XX-Standard Arm Mounting Kit (for Prevail XL) ¹⁵
PRVXLIMM-XX-Wall Mount Kit (for Prevail XL) ¹⁵
PRVXLIMA-XL-Mast Arm Mounting Kit (for Prevail XL) ¹⁵
MA1010-XX-Single Tenon Adapter for 3-1/2° O.D. Tenon MA1011-XX=2@180° Tenon Adapter for 3-1/2" O.D. Tenon MA1017-XX=Single Tenon Adapter for 2-3/8" O.D. Tenon MA1018-XX=2@180° Tenon Adapter for 2-3/8" O.D. Tenon HS/VERD=House Side Shield ^{6, 18} VGS-F/B=Vertical Glare Shield, Front/Back 18 VGS-SIDE=Vertical Glare Shield, Side ¹⁸
OA/RA1013=Photocontrol Shorting Cap
OA/RA1014=NEMA Photocontrol - 120V OA/RA1016=NEMA Photocontrol - Multi-Tap 105-285V OA/RA1201=NEMA Photocontrol - 347V OA/RA1027=NEMA Photocontrol - 480V

ISHH-01=Integrated Sensor Programming Remote ¹⁹
FSIR-100=Wireless Configuration Tool for Occupancy Sensor ²⁰

SWPD4-XX=WaveLinx Wireless Sensor, 7' – 15' Mounting Height ^{12, 13, 21} SWPD5-XX=WaveLinx Wireless Sensor, 15' – 40' Mounting Height ^{12, 13, 21}

WOLC-7P-10A=WaveLinx Outdoor Control Module (7-PIN)

- 1. DesignLights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details
- 2. Customer is responsible for engineering analysis to confirm pole and fixture compatibility for applications. Refer to installation instructions and pole white paper WP513001EN for additional support information.
- 3. Standard 4000K CCT and 70CRI.
- 4. Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems).
- 5. Use dedicated IES files on product website for non-standard CCTs
- 6. Option will come factory-installed. House Side Shield not suitable with T5 distribution or C60 lumen package.
- 7. Not available with C60 lumen package.
- 8. Only available in PRV configurations C15, C25, C40 or C60.

 9. Controls system is not available with photocontrol receptacle (PER or PER7) or other controls systems (MS, MSP, ZW or LWR).
- 10. Utilizes the Wattstopper sensor FSP-211.
- 11. Sensor passive infrared (PIR) may be overly sensitive when operating below -20°C (-4°F).
- 12. In order for the device to be field-configurable, requires WAC Gateway components WAC-PoE and WPOE-120 in appropriate quantities. Only compatible with WaveLinx system and software and requires system components to be installed for operation. See website for more Wavelinx application information.
- 13. Replace XX with sensor color (WH, BZ, or BK).
- 14. LumaWatt Pro wireless sensors are factory installed and require network components LWP-EM-1, LWP-GW-1, and LWP-PoE8 in appropriate quantities. See website for LumaWatt Pro application information.
- 15. Only available in PRV-XL configurations C75, C100, C125, C150, or C175.
- 16. Not available with 347V, 480V, or HA options. Consult LumenSafe system product pages for additional details and compatability information
- 17. Replace XX with paint color.
- 18. Must order one per optic/LED when ordering as a field-installable accessory (1, 2, 4, or 6).
- 19. This tool enables adjustment to Integrated Sensor (MSP) parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative at Eaton for more information.
- 20. This tool enables adjustment to Motion Sensor (MS) parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative at Eaton for more information
- 21. Requires Wavelinx-enabled 4-PIN twistlock receptacle (ZW) option.
- 22. Requires 7-PIN NEMA twistlock photocontrol receptacle (PER7) option. The WOLC-7 cannot be used in conjunction with other controls systems (MS, MSP, ZW or LWR).

LumenSafe Integrated Network Security Camera Technology Options (Add as Suffix)

Product Family	Camera Type	Data Backhaul
L=LumenSafe Technology	D=Dome Camera	C=Cellular, Customer Installed SIM Card E=Ethernet Networking A=Cellular, Factory Installed AT&T SIM Card V=Cellular, Factory Installed Verizon SIM Card S=Cellular, Factory Installed Sprint SIM Card

Stock Ordering Information

Product Family 1	Light Engine	Voltage	Distribution	Options (Add as Suffix)		
PRVS=Prevail	C15=(1 LED) 7,100 Nominal Lumens C25=(2 LEDs) 13,100 Nominal Lumens C40=(2 LEDs) 17,100 Nominal Lumens C60=(2 LEDs) 20,000 Nominal Lumens	UNV =Universal (120-277V) 347 =347V ²	T3=Type III T4=Type IV	MSP/DIM-L30=Integrated Sensor for Dimming Operation, Maximum 30' Mounting Height ²		
PRVS-XL=Prevail XL	C75=(4 LED) 26,100 Nominal Lumens C100=(4 LED) 31,000 Nominal Lumens C125=(4 LED) 36,000 Nominal Lumens C150=(6 LED) 41,100 Nominal Lumens C175=(6 LED) 48,600 Nominal Lumens					
NOTES:						

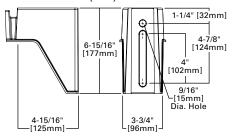
- 1. All stock configurations are standard 4000K/70CRI, bronze finish, and include the standard versatile mounting arm.
- 2. Only available in PRVS configurations C15, C25, C40 or C60.



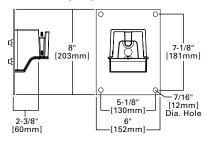
Lumark **PRV / PRV-XL Prevail**

Mounting Details

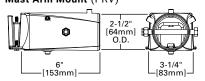
Pole Mount Arm (PRV)



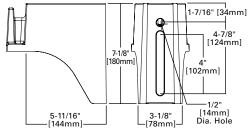
Wall Mount (PRV)



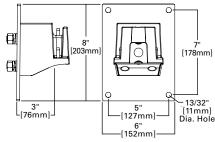
Mast Arm Mount (PRV)



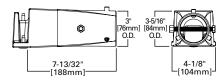
Pole Mount Arm (PRV-XL)



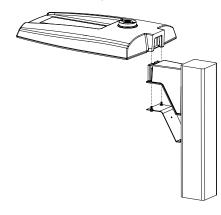
Wall Mount (PRV-XL)



Mast Arm Mount (PRV-XL)



Versatile Mount System



Mounting Configurations and EPAs

NOTE: For 2 PRV's mounted at 90°, requires minimum 3° square or 4" round pole for fixture clearance. For 2 PRV-XL's mounted at 90°, requires minimum 4" square or round pole for fixture clearance. Customer is responsible for engineering analysis to confirm pole and fixture compatibility for applications.

Wall Mount

Arm Mount Single EPA 0.92 (PRV) EPA 1.12 (PRV-XL)

Arm Mount 2 @ 180° EPA 1.35 (PRV) EPA 2.25 (PRV-XL)

Arm Mount 2 @ 90° EPA 1.42 (PRV) EPA 2.13 (PRV-XL)

Arm Mount 3 @ 90° EPA 1.63 (PRV) EPA 2.52 (PRV-XL)

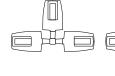
Arm Mount 4 @ 90° EPA 1.63 (PRV) EPA 2.52 (PRV-XL)

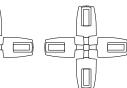










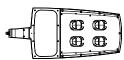


Optical Configurations

(7,100 Nominal Lumens)

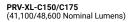
PRV-C25/C40/C60 (13,100/17,100/20,000

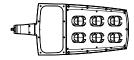




(26.100/31.000/36.300 Nominal Lumens)

PRV-XL-C75/C100/C125





Product Specifications

Construction

- Single-piece die-cast aluminum housing
- Tethered die-cast aluminum door

Optics

- Dark Sky Approved (3000K CCT and warmer only)
- Precision molded polycarbonate optics

Electrical

- -40°C minimum operating temperature
- 40°C maximum operating temperature
- >.9 power factor
- <20% total harmonic distortion

Class 1 electronic drivers have expected life of 100,000 hours with <1% failure rate

0-10V dimming driver is standard with leads external to the fixture

- Versatile, patented, standard mount arm accommodates multiple drill patterns ranging from 1-1/2" to 4-7/8'
- A knock-out on the standard mounting arm enables round pole mounting
- Prevail: 3G vibration rated
- Prevail XL Mast Arm: 3G vibration rated
- Prevail XL Standard Arm: 1.5G vibration rated

Five-stage super TGIC polyester powder coat paint, 2.5 mil nominal thickness

Shipping Data

- Prevail: 20 lbs. (9.09 kgs.)
- Prevail XL: 45 lbs. (20.41 kgs.)



Energy and Performance Data



Power an	d Lumens (PRV)			View	PRV IES files
Light Engine		C15	C25	C40	C60
Power (Watts)		52	96	131	153
Input Cur	rent @ 120V (A)	0.43	0.80	1.09	1.32
Input Cur	rrent @ 277V (A) 0.19 0.35 0.48 0.57		0.57		
Input Cur	rent @ 347V (A)	0.17	0.30	0.41	0.48
Input Cur	rent @ 480V (A)	0.12	0.22	0.30	0.35
Distributi	on				
	4000K Lumens	7,123	13,205	17,172	20,083
Type II	BUG Rating	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3
	3000K Lumens	6,994	12,965	16,860	19,718
	4000K Lumens	7,111	13,183	17,144	20,050
Type III	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4
	3000K Lumens	6,982	12,944	16,832	19,686
	4000K Lumens	7,088	13,140	17,087	19,984
Type IV	BUG Rating	B1-U0-G3	B2-U0-G4	B2-U0-G4	B3-U0-G5
	3000K Lumens	6,959	12,901	16,777	19,621
	4000K Lumens	7,576	14,045	18,264	21,360

B4-U0-G3

13,790

Lumen Maintenance

Configuration	TM-21 Lumen Maintenance (50,000 Hours)	Theoretical L70 (Hours)
Up to PRV-C60 at 25°C	91.30%	194,000
Up to PRV-C60 at 40°C	87.59%	134,000
Up to PRV-XL-C175 at 25°C	91.40%	204,000
Up to PRV-XL-C175 at 40°C	89.41%	158,000

Lumen Multiplier

Ambient Temperature	Lumen Multiplier
10°C	1.02
15°C	1.01
25°C	1.00
40°C	0.99

Power and Lumens (PRV-XL)

BUG Rating

3000K Lumens

B3-U0-G3

7,438

Type V



B5-U0-G4

20,972

B4-U0-G4

17,932

Light Engine		C75	C100	C125	C150	C175
Power (Watts)		176	217	264	285	346
Input Cur	rent @ 120V (A)	1.50	1.84	2.21	2.38	2.92
Input Cur	rent @ 277V (A)	0.66	0.82	0.97	1.04	1.25
Input Cur	rent @ 347V (A)	0.54	0.66	0.79	0.84	1.02
Input Cur	rent @ 480V (A)	0.40	0.48	0.57	0.62	0.74
Distributi	ion					
	4000K Lumens	26,263	31,231	36,503	41,349	48,876
Type II	BUG Rating	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G4	B4-U0-G5
	3000K Lumens	25,786	30,664	35,840	40,598	47,989
	4000K Lumens	26,120	31,061	36,304	41,124	48,610
Type III	BUG Rating	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	3000K Lumens	25,646	30,497	35,645	40,377	47,727
	4000K Lumens	26,098	31,035	36,274	41,089	48,569
Type IV	BUG Rating	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5
	3000K Lumens	25,624	30,471	35,615	40,343	47,687
	4000K Lumens	28,129	33,450	39,097	44,287	52,349
Type V	BUG Rating	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	3000K Lumens	27,618	32,843	38,387	43,483	51,398



Lumark **PRV / PRV-XL Prevail**

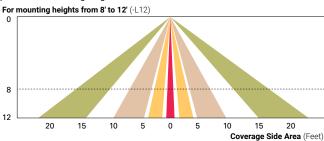
Control Options

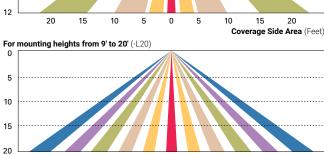
0-10V (D) The dimming option provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

Photocontrol (PER and PER7) Photocontrol receptacles provide a flexible solution to enable "dusk-to-dawn" lighting by sensing light levels. Advanced control systems compatible with NEMA 7-pin standards can be utilized with the PER7 receptacle.

Dimming Occupancy Sensor (MSP and MS) These sensors are factory installed in the luminaire housing. When a sensor for dimming operation (/DIM) option is selected, the luminaire will dim down to approximately 50 percent power after five minutes of no activity detected. When activity is detected, the luminaire returns to full light output. When a sensor for ON/OFF operation is selected, the luminaire will turn off after five minutes of no activity.

These occupancy sensors include an integral photocell that can be activated or inactivated with the programming remote / configuration tool for "dusk-to-dawn" control or "daylight harvesting". **Note:** For MSP sensors, the factory preset is OK (Enabled), and for MS sensors, the factory preset is OFF (Disabled). The programming remote / tool is a wireless tool that can be utilized to change the dimming level, time delay, sensitivity and other parameters. A variety of sensor lenses are available to optimize the coverage pattern for mounting heights from 8'-40'.

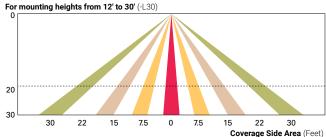


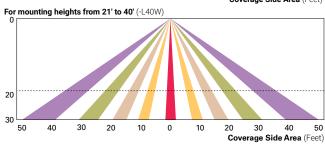


0 3 12

18

Coverage Side Area (Feet)

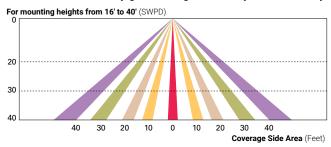




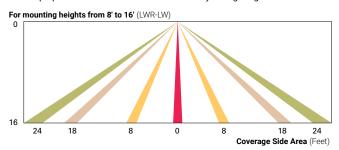
WaveLinx Wireless Control and Monitoring System Available in 7-PIN or 4-PIN configurations, the WaveLinx Outdoor control platform operates on a wireless mesh network based on IEEE 802.15.4 standards enabling wireless control of outdoor lighting. Use the WaveLinx Mobile application for set-up and configuration. At least one Wireless Area Controller (WAC) is required for full functionality and remote communication (including adjustment of any factory pre-sets).

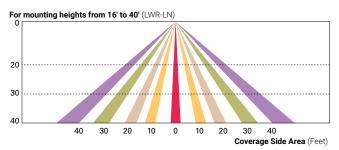
WaveLinx Outdoor Control Module (WOLC-7P-10A) A photocontrol that enables astronomic or time-based schedules to provide ON, OFF and dimming control of fixtures utilizing a 7-PIN receptacle. The out-of-box functionality is ON at dusk and OFF at dawn.

WaveLinx Wireless Sensor (SWPD4 and SWPD5) These outdoor sensors offer passive infrared (PIR) occupancy and a photocell for closed loop daylight sensing. These sensors can be factory installed or field-installed via simple, tool-less integration into luminaires equipped with the Zhaga Book 18 compliant 4-PIN receptacle (ZW). These sensors are factory preset to dim down to approximately 50 percent power after 15 minutes of no activity detected. These occupancy sensors include an integral photocell for "dusk-to-dawn" control or daylight harvesting that is factory-enabled. A variety of sensor lenses are available to optimize the coverage pattern for mounting heights from 7'-40'.



LumaWatt Pro Wireless Control and Monitoring System (LWR-LW and LWR-LN) The Eaton's LumaWatt Pro powered by Enlighted is a connected lighting solution that combines LED luminaires with an integrated wireless sensor system. The sensor controls the lighting system in compliance with the latest energy codes and collects valuable data about building performance and use. Software applications turn the granular data into information through energy dashboards and specialized apps that make it simple and help optimize the use of other resources beyond lighting.





LumenSafe (LD) The LumenSafe integrated network camera is a streamlined, outdoor-ready camera that provides high definition video surveillance. This IP camera solution is optimally designed to integrate into virtually any video management system or security software platform of choice. No additional wiring is needed beyond providing line power to the luminaire. LumenSafe features factory-installed power and networking gear in a variety of networking options allowing security integrators to design the optimal solution for active surveillance

